



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/656,764 | 09/04/2003 | Rudiger Mosig | 282721US8X | 1117 |
| 22850 7590 02/17/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | | |
| EXAMINER | | | | |
| FOUD, HICHAM B | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2419 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 02/17/2009 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/656,764

Applicant(s)

MOSIG, RUDIGER

Examiner

HICHAM B. FOUAD

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/16/2008 has been entered.

Response to Amendment

2. The amendment filed on 12-16-2008 has been entered and considered.
- Claims 33-55 are pending in this application.
- Claims 1-32 have been canceled.
- Claims 44-55 have been newly added.
- Claims 33-55 remain rejected as discussed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 33-36, 40-46 and 49-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cognet (US 6,801,505) in view of Amaral et al (US 7,031,306)

hereinafter is referred to as Amaral and further in view of Deshpande (US 2003/0061371).

For claim 33, Cognet discloses a source comprising: a sending unit configured to send out time-stamped data packets to one or more receiving sinks (see Figure 1, elements B, C and D are receiving sinks and column 1 lines 55-56; sending said time-stamped frame as generated at the instant T_s with timestamp T_o), one of the time-stamped data packet including a timestamp that is a time of creation of the one of the time-stamped data packets (see column 1 lines 51-54; generating at a given instant T_s a frame whose time stamp T_o); a determining unit configured to determine a play-out time offset (see column 1 lines 51-54; generating at a given instant T_s a frame whose time stamp T_s is equal to $T_s + \delta$, where δ is a time interval required by the computer equipment between generating a time-stamped frame and sending the last bit thereof); and a transmission unit configured to send out the play-out time offset to said one or more receiving media sinks once for all time-stamped media data packets (see column 1 lines 55-56; sending said time-stamped frame ($T_s + \delta$); wherein δ is the offset time). Cognet discloses all the subject matter with the exception of wherein the data packets are media data packets. However, Amaral discloses a method wherein the data packets are media data packets (MPEG) that have a play-out scheduled based on timing information (timestamp) (see column 2 lines 5-12). Thus, it would have been obvious to the one skill in the art at the time of the invention to use media data packets instead of regular data packets for the purpose of communicating real time packets and/or voice packets. Cognet in view of Amaral discloses all the subject matter with the

exception of wherein the sending for all time-stamped media data packets of a session. However, Deshpande discloses that for example in a home-network environment where a single audio server streams a song to multiple client devices, perhaps in different rooms of the home has to be established in a multicast session so that the clients achieve a simultaneous play-out of the song (see [0004]; multicast session). Thus, it would have been obvious to the one skill in the art at the time of the invention to send all the packets in a multicast session for the purpose of playing out the media packets through different devices at the same time.

For claim 34, Cognet further discloses: a sample clock configured to determine a sample clock time (see column 4 lines 7-8; the real time clock RTC); a global clock configured to determined a global wallclock time (see column 4 line 10; the use of GPS "UTC"); and a communication unit configured to send out a control packet to said one or more receiving media sinks, said control packet including two control packets timestamps, one of the control packet timestamps defining a moment in time in time units of said global wallclock and the second sample clock (see column 4 lines 9-11; RTC can be synchronized by GPS (global wallclock time) and see line 49-52; there's a controller wherein the RTC is initialized with the value read from the GPS; since controller exists, therefore exchange of control packets must occur for synchronization).

For claim 35, Cognet further discloses wherein the sending unit is configured such that said timestamp is the time of creation of the packets in time units of said sample clock time (see column 4 lines 7-9; frames are sent using the RTC).

For claim 36, Cognet and Amaral further discloses: wherein the sending unit is further configured to send out media data packets to two or more different receiving media sinks (see Cognet: Figure 1, elements B, C and D are receiving sinks). Cognet and Amaral disclose all the subject matter with the exception of explicitly showing the sending the same media data packets to two or more receiving sink. However, an official notice is taken in that sending same data packets to two or more receivers is known method that's called multicasting wherein the sender sends same data to two or more receivers at the same time. Thus, it would have been obvious to the one skill in the art at the time of the invention to use the multicasting method of sending data packets to two or more receivers into the system of Cognet and Amaral for the purpose of playing out the media packets through different devices at the same time.

Claims 40-43 are rejected for same reasons as claim 33-36.

For claims 44 and 49, Cognet further discloses wherein the determining unit is configured to determine the play-out time offset, which is a basis for determining, for the one of the time-stamped media data packets, a play-out time for playing out content included in the one of the time-stamped media data packets at said one or more receiving media sinks, said play-out time being determined based on adding the play-out time offset to the time of the creation of the one of the time-stamped media data packets (see column 1 lines 50-54: play-out time is defined by $T_s + \delta$, wherein δ is the time offset and T_s is indicative of the time-stamp since is the time of the generation of the frame).

For claims 45 and 50, Cognet and Amaral further discloses: wherein the sending unit is further configured to send out media data packets including media data (see Amaral: media data packets (MPEG)), and the determining unit is configured to determine the play-out time offset, based on at least a transmission time for the sending unit to send out the one of the time-stamped media data packets (Cognet: see column 1 lines 50-54: play-out time is defined by $T_s + \delta$, wherein δ is the time offset: time interval required between generating the packet and sending the last bit).

For claims 46 and 51, Cognet further discloses: the sample clock time corresponds to media data included in the data packets (see column 4 lines 7-8; the real time clock RTC); and the global wallclock time is provided to the media source and said sinks (see column 4 line 10; the use of GPS "UTC").

For claim 52, Cognet discloses a system comprising: a media source including a sending unit configured to send out time-stamped data packets to one or more receiving sinks (see Figure 1, element A is the source and elements B, C and D are receiving sinks and column 1 lines 55-56; sending said time-stamped frame as generated at the instant T_s with timestamp T_o), the time-stamped data packet including a timestamp that is a time of creation of the time-stamped data packets (see column 1 lines 51-54; generating at a given instant T_s a frame whose time stamp T_o); an offset determining unit configured to determine a play-out time offset (see column 1 lines 51-54; generating at a given instant T_s a frame whose time stamp T_s is equal to $T_s + \delta$, where δ "offset" is a time interval required by the computer equipment between generating a time-stamped frame and sending the last bit thereof); and a transmission unit configured to send out

the play-out time offset to said one or more receiving media sinks once for all time-stamped data packets (see column 1 lines 55-56; sending said time-stamped frame ($T_s + \delta$); wherein δ is the offset time). The media sink including a receiving unit configured to receive time-stamped data packets and a play-out time offset from a media source, the play-out time offset being received once for all time-stamped data packets (see Figure 1, elements B, C and D are receiving sinks and column 1 lines 55-56), a determining unit configured to determine a global wallclock time which is being provided to the media source and sinks (see column 4 line 10; the use of GPS "UTC"), an addition unit configured to determine a common play-out time of one of the time-stamped media data packet by adding the play-out time offset and the time of the creation of the time-stamped data packets (see column 1 lines 50-54; wherein the common play-out time is defined as $T_s + \delta$, wherein δ is the time offset and T_s is the time of creation of the time-stamp since is the time of the generation of the frame). Cognet discloses all the subject matter with the exception of explicitly disclosing wherein the data packets are media data packets and a play-out unit configured to play-out the time stamped packet when the determined common play-out time is reached. However, Amaral discloses a method wherein the data packets are media data packets (MPEG) that have a play-out scheduled based on timing information (timestamp) (see column 2 lines 5-12). Thus, it would have been obvious to the one skill in the art at the time of the invention to use media data packets instead of regular data packets and playing-out the media packets when the scheduled time (common play-out time) is reached for the purpose of communicating and synchronously playing-out real time

packets and/or voice packets. Cognet in view of Amaral discloses all the subject matter with the exception of wherein the sending for all time-stamped media data packets of a session. However, Deshpande discloses that for example in a home-network environment where a single audio server streams a song to multiple client devices, perhaps in different rooms of the home has to be established in a multicast session so that the clients achieve a simultaneous play-out of the song (see [0004]; multicast session). Thus, it would have been obvious to the one skill in the art at the time of the invention to send all the packets in a multicast session for the purpose of playing out the media packets through different devices at the same time.

Claims 53 and 54 are rejected for same reasons as claims 34 and 35 respectively.

Claim 55 is rejected for same reasons as claim 52.

4. Claims 37, 39 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amaral (US 7,031,306) in view of Cognet and further in view of Deshpande (US 2003/0061371).

For claim 37, Amaral discloses a media sink comprising: a receiving unit configured to receive time-stamped media data packets and a play-out time offset from a media source (see column 2 lines 6-7; receiving data packets); and a determining unit configured to determine a global wallclock time (see column 2 lines 8-10; determining the play-out schedule for data packets based on timing information in the data packets). Amaral further discloses that the play-out schedule may control the play-out at times that corresponds to the timestamps (see column 2 lines 15-17). Amaral discloses all

the subject matter with the exception of explicitly disclosing a common play-out time of one of the time-stamped media data packet, the common play-out time indicated by a timestamp of the time-stamped media data packets by adding a time indicated by a timestamp and play-out time offset. However, Cognet discloses a method wherein the common play-out time is defined as $T_s + \delta$, wherein δ is the time offset and T_s is indicative of the time-stamp since is the time of the generation of the frame (see column 1 lines 50-54). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the common play-out time as described in the invention of Cognet into the system of Amaral for the purpose of simultaneous play-out of the media packets at the receivers. Amaral in view of Cognet discloses all the subject matter with the exception of wherein the sending for all time-stamped media data packets of a session. However, Deshpande discloses that for example in a home-network environment where a single audio server streams a song to multiple client devices, perhaps in different rooms of the home has to be established in a multicast session so that the clients achieve a simultaneous play-out of the song (see [0004]; multicast session). Thus, it would have been obvious to the one skill in the art at the time of the invention to send all the packets in a multicast session for the purpose of playing out the media packets through different devices at the same time.

For claim 39, Amaral further discloses a buffer configured to store the media data packets until said common play-out time is reached (see column 2 lines 7-10; storing the data packets in a buffer, determining a play-out schedule).

For claim 47, Amaral in view of Cognet and further in view of Deshpande further discloses: wherein the sending unit is further configured to send out media data packets including media data (see Amaral: media data packets (MPEG)), and the determining unit is configured to determine the play-out time offset, based on at least a transmission time for the sending unit to send out the one of the time-stamped media data packets (Cognet: see column 1 lines 50-54: play-out time is defined by $T_s + \delta$, wherein δ is the time offset: time interval required between generating the packet and sending the last bit).

5. Claims 38 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amaral et al hereinafter is referred to as Amaral in view of Cognet and further in view of Deshpande and further in view of Schuster et al (US 6,360,271) hereinafter is referred to as Schuster.

For claim 38, Amaral in view of Cognet and further in view of Deshpande discloses all subject matter without explicitly disclosing a conversion unit configured to convert the time which is defined in time units of the sample clock into a time of the global wallclock time wherein the receiving unit receiving a control packet, said control packet including two control packets time-stamped at certain moment in time, the first with global wallclock and the second with sample clock. However, Schuster discloses a method wherein the receiving end includes a second time signal (global wallclock time) synchronized with the first time signal (sample clock) that is been used at the transmitting end (for both signals to be synchronized, control packets has to be exchanged or otherwise how can they be synchronized) and also the play-out will be in

response to the second clock signal (global wallclock time). Therefore, the first time signal has to be converted to the second time signal to determine the play-out time (see column 8 lines 17-28). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the method of Schuster into the system of Amaral in view of Cognet and further in view of Deshpande for the purpose of synchronization of the different clocks.

For claim 48, Cognet further discloses: the sample clock time corresponds to media data included in the data packets (see column 4 lines 7-8; the real time clock RTC).

Response to Argument

6. Applicant's arguments filed have been fully considered but they are not persuasive.
7. In page 11 of the Remarks, the applicant argues that Cognet does not indicate a time of generation of the packets. However, the examiner respectfully disagrees since the time stamp T_o includes the time of the generation which is T_s because $T_o = T_s + \delta$. Therefore the timestamp T_o includes the time of the creation of the packet which is T_s .
8. In pages 12-13 of the Remarks, the Applicant repeatedly argues that Cognet does not teach "a sending unit". Examiner respectfully disagrees; the feature of the limitation listed above is clearly met by Cognet. Cognet explicitly designates the sending unit (see Figure 1, element A is the source and elements B, C and D are receiving sinks and column 1 lines 55-56; sending said time-stamped frame as generated at the instant T_s with timestamp T_o). Cognet does not choose to use his own lexicography to

designate the sending unit. However, the steps performed by Cognet are the same regardless to the terminology used. Furthermore, the applicant argued that Cognet does not teach the addition unit configured to determine the common play-out time. However, the examiner disagrees with the applicant because Cognet discloses a method wherein the common play-out time is defined as $T_s + \delta$, wherein δ is the time offset and T_s is the time-stamp since it's the time of the generation of the frame (see column 1 lines 50-54).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

10. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Friday 10-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hicham B Foud/
Examiner, Art Unit 2419
02/04/2009

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2419
2/11/09